WHALES FROM THE COAST OF SOUTH AUSTRALIA

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Summary

The past occurrence of 18 species of whales in waters off the coast of South Australia is confirmed by material preserved in the South Australian Museum. Such material is listed with acquisition data and registration numbers.

The species are: *Eubalaena glacialis australis, Caperea marginata, Balaenoptera musculus, Balaenoptera physalus, Balaenoptera edeni, Megaptera novaeangliae, Physeter catodon, Kogia breviceps, Kogia simus, Berardius arnouxi, Ziphius cavirostris, Hyperoodon planifrons, Mesoplodon grayi, Mesoplodon layardi, Pseudorca crassidens, Globicephala melaena melaena, Tursiops truncatus, Delphinus delphis. Orcinus orca* is suspected to occur.

Balaenoptera edeni is recorded for the first time from South Australia and a South Australian specimen of *Ziphius cavirostris* is described for the first time. Previous South Australian records of 5 whale species are shown to have been based on incorrect identifications and the previous record of *Grampus griseus* is considered to be of doubtful validity.

Introduction

In 1837, shortly after the foundation of South Australia, the first industry of the new colony was commenced when a party from Sydney under Captain Blenkinsop in the "Hind" and a double party from the South Australian Company established rival shore-whaling stations at Encounter Bay. It was not until 1889, however, that Amandus Zietz, then Assistant Director of the Public Museum in Adelaide, published the first list of whales from the South Australian coast. Zietz's list comprised 7 species and in subsequent years this number has risen gradually to 17 through contributions from Waite (1919 and 1922), Wood Jones (1925), Hale (1931, 1945, 1959 and 1962b), Handley (1966) and Aitken (1970).

A recent examination of whale remains in the collections of the South Australian Museum revealed that 18 species were represented by specimens from the South Australian coast, and that some previous South Australian species records had been based on incorrect identifications.

An annotated list of whales from the South Australian coast is appended below, compiled from skeletal, cast and photographic material stored in the South Australian Museum. The only specimens used have been those which can be identified accurately to species and for which positive locality data is recorded. The Museum also holds a large collection of cetacean jetsam such as odd vertebrae, broken pieces of mandibles, etc., which are most difficult to identify with certainty. Such material has been disregarded together with numerous identifiable specimens for which no locality is known.

The nomenclature used follows that of Hershkovitz (1966) with the exception of the name *Kogia simus*, a species that Hershkovitz did not recognise.

MYSTACOCETI—WHALEBONE WHALES

BALAENIDAE—Right Whales

Eubalaena glacialis australis (Desmoulins, 1822)—the Southern Right Whale.

Southern right whales, or black whales as they were called by early whalers, provided the mainstay for shore-whaling operations in South Australia from 1837 until the mid 1850's, when such ventures became unprofitable through the over-exploitation and subsequent rarity of the whales. In spite of this flourishing early industry in South Australia, not one specimen of a southern right whale, or part thereof, was preserved in the State Museum and, since no authenticated sighting of this whale was made in South Australia during the first half of the present century, the species was presumed to have vanished from the waters around the State. However, on October 9, 1968, photographs were taken of a large whale and calf swimming close inshore at the entrance to Port Lincoln Proper. From these photographs, now lodged with the South Australian Museum, it was possible to identify

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these whales as southern right whales by the bonnet, strongly arched mouth and length of the adult (approx. 15 m) and the lack of a dorsal fin on either the adult or the calf.

The whale and calf were not seen again and it was assumed that they had either moved westwards into the Great Australian Bight or commenced a southerly migration towards their summer feeding grounds amongst the antarctic pack ice. Evidence for these assumptions is provided by an early record of the coastal migrations of southern right whales that appeared in a "Report on Whaling in South Australia", published in the "Southern Australian" on January 4, 1842. John Hart, Jacob Hagen and John Barker, the authors of the report, state that: "The general course of the Black Whale in these Seas, as winter approaches, appears to be from the south-east, consequently the southern shore of Van Diemen's Land is first visited by them, which may be about the beginning of April. These move towards Portland Bay; others continue through the winter to arrive and pass forward. Of those which enter Encounter Bay some have probably coasted along from Portland Bay, while others, it would appear, strike the coast there for the first time. In like manner the whole southern coast of this continent is visited by them, some having come along the land, whilst others are more direct from the great Southern Ocean. At Cape Lewin [*sic.*] the great body of whales seem to strike off Southward, for in October and November they are again working towards the south-east, by keeping two or three hundred miles from the land, where they are again pursued by vessels engaged in the 'Off-shore Fishery'. It is a curious fact that some time after their disappearance from the southern bays of Van Diemen's Land they re-appear suddenly, and in large numbers, in the eastern bays of that island, where they remain only three or four weeks . . ."

Caperea marginata (Gray, 1846)—the Pygmy Right Whale.

Seven pygmy right whales have been recorded from the South Australian coast (Hale, 1964) (Table 1). All known strandings have occurred between early spring and mid summer, in bays with shoaling waters where extensive mud flats or sand spits are exposed at low tide.

TABLE 1

Material of Caperea marginata *in the South Australian Museum.*

No.	Date	Sex	Locality	Material
M1593	21.X.1884	?	Brownlow, Kangaroo I.	Skeleton
M2966	13.IX.1887	♂	Victor Harbour, Encounter Bay (snared in fishing net)	Skeleton
M3967	21.X.1889	♂	Point Marsden, Kangaroo I.	Plaster cast of head
M1575?	before 1948	?(juv.)	Port Lincoln Proper	Part Skeleton
M6110	26.XII.1955	♂	Port Lincoln Proper	Skeleton
M6111	about 1950	?	Coffin Bay	Skeleton
—	16.VIII.1960	♀	Port Lincoln Proper	Photographs

BALAENOPTERIDAE—Rorquals

Balaenoptera musculus (Linnaeus, 1758)—the Blue Whale.

Two blue whales are known to have been stranded on the South Australian coast. The first, at Corvisart Bay, western Eyre Peninsula on September 9, 1918, was an adult female with a total length of 26·61 metres (Waite, 1919). The skeleton was preserved and stored for many years at the South Australian Museum, but as a result of inadequate storage facilities, vandalism and rat damage most of the bones had either disappeared or been broken beyond repair by 1950. All that remains today are a few caudal vertebrae and one mandible (M793). The second example, represented by 2 baleen plates (M3258), was stranded at Kingston in Lacepede Bay during June, 1932.

Balaenoptera physalus (Linnaeus, 1958)—the Finback Whale.

In late July or early August, 1925, a very young male rorqual of total length 7·41 metres was stranded on the extensive mud flats at the head of St. Vincent Gulf. Approximately 6 weeks later on September 16, 1925, the skeleton was collected for preservation in the South Australian Museum (M2179). Waite (1926) described this rorqual as a young blue whale, but a subsequent examination of the specimen has convinced me that it is a juvenile finback whale.

The rostrum of the cranium is triangular when viewed from above, as opposed to the ovate outline typical of *B. musculus* (Allen, 1916). The premaxillae extend backwards to a point mid-way along the sides of the nasals, as opposed to the condition in *B. musculus* and *B. borealis*—the Sei Whale, where the premaxillae terminate at or behind the pos-

terior dorsal margin of the nasals (Allen, 1916). The total number of vertebrae is 61, but according to Waite one or two of the terminal elements may have been lost. This number conforms with that of *B. physalus* (63) (Allen, 1916), but not with *B. borealis* (57) (Andrews, 1916) or *B. edeni*—Bryde's Whale (54-55) (Omura, 1966). According to Waite the number of major baleen plates in each series was about 374, which is within the limits for *B. physalus* (350-400) (Hall and Kelson, 1959), but not for *B. borealis* (320-340) (Hall and Kelson, 1959) or *B. edeni* (250-280) (Olsen, 1913). The colour of the baleen, as described by Waite, was: "horn coloured, darkening to the outer edges, so that, viewed externally, the series appears to be black in its upper half, fading downwards, the lower third of each plate being yellowish-white, which is also the hue of the bristles developed on the whole inner surface of the series". Such a colour pattern is within the range for *B. physalus* baleen (Allen, 1916), but does not compare with the all black baleen and black bristles of *B. musculus* (Gaskin, 1968) or the black baleen with white hair fringes of *B. borealis* (Gaskin, 1968).

Balaenoptera edeni Anderson, 1878—Bryde's Whale.

In 1883, a medium sized rorqual was stranded at Corny Point and its skeleton, lacking only the sternum and tongue bones, was mounted for display in the South Australian Museum (M5584). Zietz (1889) tentatively identified this rorqual as a humpback whale (*Megaptera novaeangliae*), an erroneous conclusion perpetuated by Wood Jones (1925). The presence of well developed acromion and coracoid processes on the scapulae show that the skeleton could not be that of *M. novaeangliae* (True, 1904), but must be that of another balaenopterid rorqual. Complete coalescence of all vertebral epiphyses indicate that the skeleton is that of an adult in which the total length from the anterior tip of the upper jaw to the posterior tip of the last caudal vertebra is 12·56 m and the vertebrae number 54. This combination excludes *B. acutorostrata*—the Minke Whale in which the total length in adults very seldom exceeds 9·15 m (Gaskin, 1968) with 50 vertebrae (Allen, 1916), also *B. musculus* in which the total length in adults exceeds 20 m with 64 vertebrae (Allen, 1916) and *B. physalus* in which the total length in adults exceeds 16 m with 63 vertebrae (Allen, 1916). The skeleton could possibly be that of *B. borealis* in which the total length in adults ranges from 12-15 m (approx.) with 57 vertebrae (Andrews, 1916), but is more likely to be that of *B. edeni* in which the average total length in adults is 13 m (Olsen, 1913) with 54-55 vertebrae (Omura, 1966).

Comparison of the skeleton with descriptions and figures of the skeletal anatomy of *B. edeni* (Omura, 1959 and 1966) and *B. borealis* (Andrews, 1916) shows it to be that of *B. edeni* because: the dorsal surface of the rostrum is relatively straight and flat with the anterior tips of the premaxillae sunk between the maxillae (*B. borealis* has a curved rostrum with mesially elevated premaxillae); the anterior margin of the nasals is bent forward on the outer sides (in *B. borealis* the anterior margin of the nasals is straight); the anterior margin of the nasals falls well behind the anterior borders of the maxillary concavities (in *B. borealis* these two features are at the same level); there are no grooves between the squamosal and articular parts of the temporals (*B. borealis* has deep grooves); the angular shafts of the mandibles extend behind the articular condyles (in *B. borealis* they terminate in front of the condyles); and the spinous processes of the last 6 dorsal and the first 4 lumbar vertebrae are inclined so far to the rear that their anterior tips are behind the posterior vertical planes of their centra (in *B. borealis* the spinous processes are not so backwardly inclined).

The Corny Point skeleton differs from the description of *B. edeni* given by Omura (1959) in that it has a pair of rudimentary fourteenth ribs, 13 chevrons and a vertebral column of 7 cervical, 14 dorsal, 12 lumber and 21 caudal vertebrae. Omura considered *B. edeni* to possess 13 pairs of ribs, 12 chevrons and have a vertebral formula of 7:13:13:21.

Megaptera novaeangliae (Borowski, 1781)—the Humpback Whale.

Humpback whales migrate annually between their summer feeding grounds in the Antarctic and their winter breeding areas in sub-tropical waters. On these migrations many individuals congregate along the eastern and western coasts of Australia swimming northward in autumn and southward in spring, during which seasons they have been commercially exploited by whaling stations in Western Australia and Queensland since the middle of the nineteenth century. It is apparent, however,

that their migratory routes seldom pass through the Great Australian Bight (Dawbin, 1966) and, in consequence, stranded humpback whales are rare on the South Australian coast.

Chittleborough (1965) records two sightings of humpback whales swimming off the coast of South Australia, a single individual in 1952 at the head of the Great Australian Bight and a female with new-born calf in St. Vincent Gulf during the winter of 1961.

Only one example is known to have been stranded, however, represented by a scapula and humerus in the South Australian Museum (M5120). All that is known of the history of this specimen is that it was collected prior to November 1943 (date of registration) on the west coast of South Australia.

ODONTOCETI—TOOTHED WHALES

PHYSETERIDAE—Sperm Whales

Physeter catodon Linnaeus, 1758—the Sperm Whale.

Although sperm whales were hunted occasionally by the early bay whalers of South Australia, reports indicate that very few were captured. Newland (1921) in an account of whaling activities at Encounter Bay stated that: "to obtain [sperm whale] in the forties properly equipped vessels were required as the animal resorted to very deep waters when scenting danger". In fact, most sperm whaling around Australia at that time was carried out by pelagic whalers from other countries, particularly North America.

Tremendous numbers of sperm whales were slaughtered by the nineteenth century whalers and the slaughter has continued with increasing efficiency throughout the present century. But in spite of this relentless attack sperm whales are still observed off the coast of South Australia, as reported to me by cray fishermen from the south-east of the State and aerial tuna spotters from Port Lincoln, and material evidence of 3 stranded specimens is preserved in the South Australian Museum (Table 2). Single teeth of this species have been collected also from Kingston, Beachport and Sleaford Bay.

Kogia breviceps (Blainville, 1838)—the Pygmy Sperm Whale.

The first record of a pygmy sperm whale from South Australia was made by Zietz (1889), who stated that:—"A lower jaw of this very small species was recently obtained by Mr. Adcock at Middleton, Encounter Bay, and by him presented to the South Australian Museum. The dental formula is $\frac{0}{8}$ $\frac{0}{8}$". The lower jaw referred to by Zietz has not been located with certainty, since the only *Kogia* jaw of unknown origin in the collections of the South Australian Museum has 14 teeth in each ramus. However, 9 other pygmy sperm whales are known to have been stranded on the South Australian coast (Hale, 1962 and 1963) (Table 3). Hale reported that most of these strandings occurred during calm weather and all have occurred from late autumn to early spring.

TABLE 2

Material of Physeter catodon *in the South Australian Museum.*

No.	Date	Sex	Locality	Material
M5585	XI.1881	♀	Point Bolingbroke, Louth Bay	Skeleton
M7194	26.VI.1966	♂	Victor Harbour, Encounter Bay	Skull
—	V.1956	♀	Coffin Bay	Photographs

TABLE 3

Material of Kogia breviceps *in the South Australian Museum.*

No.	Date	Sex	Locality	Material
M5009	25.IV.1937	♀	Port Victoria, Spencer Gulf	Cast and skeleton
M5010	25.IV.1937	♀ (juv.)	Port Victoria, Spencer Gulf	Cast and skeleton
M5011	25.IV.1937	♂ (foetus of M5009)	Port Victoria, Spencer Gulf	Spirit
M5197	VIII.1944	?	Sleaford Bay	Part skeleton
M6156	7.VIII.1957	♂	Sleaford Bay	Teeth
M6156	7.VIII.1957	? (juv.)	Sleaford Bay	Skull
M6256	28.VI.1959	♀	Encounter Bay	Skeleton
M6257	28.VI.1959	♀ (juv.)	Encounter Bay	Skeleton
M6266	29.IX.1959	♂	Glenelg, St. Vincent Gulf	Skeleton
M6310	12.IX.1961	♀ (juv.)	Grange, St. Vincent Gulf	Skeleton

Kogia simus (Owen, 1866)—the Dwarf Sperm Whale.

On July 12, 1958, two small whales were stranded at Largs Bay, on the eastern shore of St. Vincent Gulf. One of these whales, a male, was secured for the South Australian Museum and prepared as a skeleton (M6186). The skull of the other whale was smashed and its body was hacked to pieces by souvenir hunters as soon as it reached the beach, but before this, two excellent coloured photographs

of the whale were taken whilst it was thrashing about in shallow water, and these photographs also were lodged with the Museum. Hale (1959) described both specimens as *K. breviceps*, but a recent examination of the skeleton from the first whale and the photographs of the second whale indicated, on the evidence supplied by Handley (1966), that both are examples of *K. simus*. The first whale (M6186) may be recognised as *K. simus* from the skull, which has a single pair of maxillary teeth (*K. breviceps* has none); a ventrally plane, short mandibular symphysis, approximately one tenth of the ramus length (in *K. breviceps* this symphysis is ventrally keeled and approximately one quarter of the ramus length); posteriorly cupped, subsymmetrical dorsal cranial fossae (in *K. breviceps* these fossae are not cupped posteriorly and the left fossa is conspicuously longer and narrower than the right fossa); and a dorsal sagittal septum pinched near the vertex (in *K. breviceps* this septum is broadly expanded near the vertex). The second whale may be recognised as *K. simus* from the photographs, both of which depict a high dorsal fin placed near the centre of the back (*K. breviceps* has a low dorsal fin placed some distance behind the centre of the back).

ZIPHIIDAE—Beaked Whales

Berardius arnouxi Duvernoy, 1851—the Large Beaked Whale.

On December 27, 1935, a pregnant female large beaked whale was stranded on a wide, tidal flat south of Port Lorne near the head of St. Vincent Gulf. The skeleton of this whale, minus caudal vertebrae 4-19, was collected for preservation in the South Australian Museum (M5012). Hale (1962b) provided a full description.

Ziphus cavirostris Cuvier, 1823—Cuvier's Beaked Whale.

One cuvier's beaked whale is known to have been stranded on the South Australian coast at Maslins Beach, south of Noarlunga, on the eastern side of St. Vincent Gulf. The whale, a young male, came ashore on a particularly high tide during the night of April 22, 1966. On the following day the carcase was buried by local council employees in a nearby sand quarry, from where it was disinterred by me on April 27, 1966. Flesh measurements were taken and the complete skeleton was flensed for preservation in the South Australian Museum (M8400). Positive identification of the specimen was made by comparing the nasal and pre-maxillary bones at the synvertex of the skull with those figured for *Z. cavirostris* by Moore (1968).

Flesh dimensions are presented in Table 4 and skull measurements in Table 5. Other details of the external and skeletal anatomy appear below.

TABLE 4

Flesh dimensions of Ziphius cavirostris *from Maslins Beach.*

Tip of snout to posterior margin of tail (curvilinear)	6000 mm
Tip of snout to anterior margin of dorsal fin	3790
Basal length of dorsal fin	305
Tip of snout to eye	710
Tip of snout to axilla	1500
Tip of snout to blowhole	664
Tip of snout to angle of mouth	308
Angle of mouth to eye	410
Breadth across tail flukes	1360
Tip of mandible to anus (curvilinear)	3860
Tip of mandible to tip of snout	20
Length of pectoral fin from axilla	430
Greatest breadth of pectoral fin	150
Greatest girth	3200

External characters: purple-black on the dorsal half of the body and around the head, tail and pectoral fins, grading through dark grey-brown on the lower sides to pale grey-brown on the belly. A smoothly curved forehead with no pronounced bulge; 2 conspicuous throat grooves on the posterior third of the lower jaw extending backwards to the level of a point midway between the angle of the mouth and the eye; and no central notch between the tail flukes.

Teeth: two conical, open rooted teeth protruding above the gums, one from the anterior tip of each mandible and approximately 30 vestigial teeth buried in the gum of each mandible.

TABLE 5

Skull Measurements of Ziphius cavirostris *from Maslins Beach.*

Condylo basal length	920 mm
Breadth across post-orbital processes	505
Height from synvertex to inferior border of pterygoids	480
Greatest length of nasals	135
Greatest breadth of nasals	62
Length of rostrum	510
Breadth of rostrum at base	215
Length of mandible (cal; tip broken)	790
Length of mandibular symphysis (cal.)	155
Height of right tooth	52·5
Greatest diameter of right tooth	12·7
Height of left tooth	53·2
Greatest diameter of left tooth	12·5
Height of typical vestigial tooth	4·7
Greatest diameter of typical vestigial tooth	1·8

Age: Ossification of the cranial sutures, but lack of anchylosis of all vertebral epiphyses other than the fused 1st-4th and 6th-7th cervical vertebrae, suggests a young adult.
Vertebrae, ribs and chevrons: the vertebral column consists of 7 cervical, 10 dorsal, 10 lumbar and 19 caudal vertebrae. Ten ribs are present on each side, but the tenth rib on the left is a demi-rib, half the size of its counterpart on the right. Ten chevrons are present, all joined, the third being the deepest.
Pelvic bones: subequal, the left element being of equal depth but 8 mm shorter than the right element, which has a total length of 89 mm and a greatest depth of 12 mm.

Hyperoodon planifrons Flower, 1882—the Southern Bottlenosed Whale.

On November 22, 1929, an adult male southern bottlenosed whale was stranded near Port Rickaby on the eastern shore of Spencer Gulf. A full description of this whale was provided by Hale (1931) and its complete skeleton is preserved in the South Australian Museum (M2852).

Mesoplodon grayi von Haast, 1876—Gray's Beaked Whale.

The first record of a gray's beaked whale in South Australian waters was that of Waite (1922), based on the right mandible from a specimen stranded at Kingscote, Kangaroo Island in 1910. Since that date, 2 further examples are known to have been stranded on the South Australian coast (Table 6).

TABLE 6
Material of Mesoplodon grayi *in the South Australian Museum.*

No.	Date	Sex	Locality	Material
M 849	IV.1910	?	Kingscote, Kangaroo I.	Right mandible
M3003	II.1931	?	Younghusband Peninsula	Part skeleton and skin of jaw
M7476	14.1.1964	♀	Aldinga, St. Vincent Gulf	Skull

Mesoplodon layardi (Gray, 1865)—the Strap-toothed Whale.

Thirteen strap-toothed whales are known to have been stranded on the South Australian coast. The first of these was recorded by Waite (1922) with a specimen collected in 1919 from Kangaroo Island and three of the remaining examples have been described by Hale (1931). Details of the acquisition of 12 of these whales are summarised in Table 7. The thirteenth example, for which no specimen is available in the South Australian Museum, was recorded by Hale (1931) after he had examined privately owned photographs and teeth from a male strap-toothed whale stranded on Coffin Bay Peninsula in February 1933. All strandings have occurred in mid-summer.

TABLE 7
Material of Mesoplodon layardi *in the South Australian Museum.*

No.	Date	Sex	Locality	Material
M 794	II.1919	♀	Kangaroo Is.	Skeleton
M2853	XII.1929	♀	Port Rickaby, Spencer Gulf	Skull
M2969	3.III.1931	♂	Victor Harbour, Encounter Bay	Skull
M4564	14.1.1934	?	Streaky Bay	Skull
M5006	12.1.1939	♀	Victor Harbour, Encounter Bay	Skeleton
M5007	12.1.1939	♀	Victor Harbour, Encounter Bay	Skull
M5008	12.1.1939	♀	Victor Harbour, Encounter Bay	Skull
M6269	13.II.1956	♂	Rocky Point, Kangaroo I.	Skeleton
M8401	III.1969	♂	Cape Elizabeth, Spencer Gulf	Part skeleton
	3.II.1931	♀	Victor Harbour, Encounter Bay	Photographs
—	2.II.1939	♀	Wharffs Point, Streaky Bay	Photographs
—	3.II.1939	?	Wharffs Point, Streaky Bay	Photographs

GLOBICEPHALIDAE—Great Dolphins

Pseudorca crassidens (Owen, 1846)—the False Killer Whale

On October 5, 1944, there was a mass stranding of false killer whales on the eastern side of St. Vincent Gulf. The main body of about 200 whales came ashore at Port Prime, but a smaller concentration of about 50 whales landed approximately 2½ kilometres further north and isolated individuals were found over a 30 kilometre front between Port Parham and Port Gawler. Hale (1945) initially identified these whales as pilot whales (*Globicephala melaena*) but corrected his error in a later paper (1959). No examples were secured for the South Australian Museum at the time of the stranding in 1944, but skeletal material can still be found scattered amongst the dunes along the beach near Port Prime and a well preserved cranium with 2 teeth *in situ* was collected recently to provide specimen evidence of the event (M8384).

Globicephala melaena melaena (Traill, 1809)—the Pilot Whale.

Five pilot whales are represented in the collections of the South Australian Museum (Table 8). No other examples are known to have been stranded in South Australia.

TABLE 8

Material of Globicephala melaena melaena *in the South Australian Museum*

No.	Date	Sex	Locality	Material
M1592	before 1922	?	St. Vincent Gulf	Skeleton
M5645	5.IX.1903	♀	Glenelg, St. Vincent Gulf	Skeleton
M5646	5.IX.1903	♂	Glenelg, St. Vincent Gulf	Skeleton
M5647	5.IX.1903	♂	Glenelg, St. Vincent Gulf	Skeleton
M5648	5.IX.1903	♂	Glenelg, St. Vincent Gulf	Skeleton

DELPHINIDAE—Lesser Dolphins

Tursiops truncatus (Montagu, 1821)—the Bottlenosed Dolphin.

The first record of bottlenosed dolphins in South Australian waters was made by Wood Jones (1925) who considered the species to be: "evidently not uncommon around our [South Australian] coast". Wood Jones cited examples of skulls he had examined from Port Lincoln, Port Noarlunga and Cowell. Nevertheless, the first actual record of the species for South Australia was almost certainly that of Zietz (1889) under the name of *Steno rostratus*, because in his description of *S. rostratus* Zietz stated: "This species, as in the case of the Common Dolphin [*Delphinus delphis*], is incorrectly called a porpoise. It is easily distinguished from the porpoise by having a much larger and thicker head, and the snout more tapering, and not so abruptly narrowed: the tail and breast fins are also much broader, and the body narrowed behind. It is not so neatly shaped as *Delphinus delphis*, and the teeth are much stronger and less numerous . . . Its presence in the Australian Seas has hitherto not been noted, though it is not uncommon on our [South Australian] coast."

Now, since *S. rostratus* (presently classed as a synonym of *Steno bradanensis* Lesson, 1828) is neatly shaped and does resemble *D. delphis* (Gaskin, 1968) and since Zietz compiled his account from material in the South Australian Museum where no specimens of *Steno* are held in the collection, it is reasonable to assume that Zietz was mistaken in his identification. However, Zietz's description is well suited to another dolphin, which is abundant around the South Australian coast and which is well represented by specimens in the South Australian Museum, namely *Tursiops truncatus*.

Bottlenosed dolphins are abundant throughout the year off South Australia and may frequently be observed swimming close inshore. Few become stranded, however, and when related to their obvious abundance there is a relatively small number of examples preserved in the South Australian Museum (Table 9).

TABLE 9

Material of Tursiops truncatus *in the South Australian Museum.*

No.	Date	Sex	Locality	Material
M1384	before 1922	?	South Australia	Skull
M1597	before 1922	?	South Australia	Cast
M2130	7.V.1925	?	Franklin Harbour	Skull
M2666	V.1929	?	Sellicks Beach, Encounter Bay	Skull
M4819	1935	?	Henley Beach, St. Vincent Gulf	Part skull
M5078	8.III.1941	♂	Port Lincoln Proper	Skeleton
M5609	before 1945	?	Glenelg, St. Vincent Gulf	Part skull
M5795	before 1950	?	Cape Jervis, Investigator Straight	Part skull
M5902	29.XI.1950	?	Woods Well, Lacepede Bay	Skull
M6038	1.V.1955	?	Murray Mouth, Encounter Bay	Skull
M7479	24.II.1968	?	West I., Encounter Bay	Mandible
M8383	VIII.1969	♂	Port Stanvac, Encounter Bay	Skull

Delphinus delphis Linnaeus, 1758—the Common Dolphin.

Common dolphins, first recorded for South Australia by Zietz (1889), are abundant in all seasons throughout the waters around the State. They are sometimes observed close inshore, but appear to be most numerous some distance from land, where they are a familiar sight to fishermen and other seafarers due to their habit of ship pacing. These dolphins seldom become stranded and are not well represented in the collections of the South Australian Museum (Table 10).

DOUBTFUL RECORDS

GLOBICEPHALIDAE—Great Dolphins

Orcinus orca (Linnaeus, 1758)—the Killer Whale.

TABLE 10

Material of Delphinus delphis *in the South Australian Museum.*

No.	Date	Sex	Locality	Material
M1389	before 1922	?	South Australia	Part skull
M2297	9.III.1927	?	Yorke Peninsula	Skull
M3017	XI.1931	?	Younghusband Peninsula	Part skull
M4815	29.X.1936	♂	Brighton, St. Vincent Gulf	Skeleton and cast
M4847	before 1940	? (juv.)	Victor Harbour, Encounter Bay	Skull
M4976	11.X.1892	♀	Port Adelaide, St. Vincent Gulf	Skeleton
M7480	before 1969	? (juv.)	Port Lincoln Proper	Skull

Wood Jones (1925) recorded killer whales for South Australia on the basis of an *Orcinus* skull in the South Australian Museum (M5649). Wood Jones stated that this skull: "probably came from the shores of this [South Australia] State". But, in fact, there is no evidence to support such a view. The skull is labelled 'Old Collection—no data' and could have come from anywhere in Australia or have been purchased from overseas. It is probable, however, that killer whales do occur off the coast of South Australia since the South Australian Museum also possesses a mandible of this species (M5345), from Portland in Victoria, only 80 kilometres east of the South Australian border.

Grampus griseus (Cuvier, 1812)—Risso's Dolphin (formerly—the Grampus).

Zietz (1889) reported that: "A skeleton of a grampus eleven feet long, was found on the beach between Glenelg and Brighton, the skull of which is in the [South Australian] Museum". A careful search of all cetacean material in the South Australian Museum has failed to reveal either this specimen or any skulls of *G. griseus*. Either the skull has been lost or Zietz was mistaken in his identification.

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